

MarTREC UTC Project Information Form

USDOT Tier 1 University Transportation Center Agency ID or Contract Number 69A3551747130

Project Title: Developing and Applying a Methodology to Identify Flow Generation Influences between Vessel and Truck Shipments

Project Abstract (Brief Description): Truck activity is logically connected to, and generated by, vessel activity at a port. In turn, vessel activity is generated by truck shipments. Although one might expect a 1-to-1 relation between the two types of shipments, that is unlikely the case. For instance, many maritime containers carry consolidated cargos that have multiple (and different) final destinations. Furthermore, different truck capacities and regulations play a critical role in determining the actual relation between these two shipment modes. A clearer and quantitative understanding of the relationship between vessel and truck shipments enables agencies and organizations to develop a system for managing trucks that maximizes efficiency for industry, while minimizing industry's negative impacts on a region.

Describe Implementation of Research Outcomes: The model will be tested (implemented) at Port Freeport. Lessons learned from this case study implementation can inform future port applications.

Impacts/Benefits of Implementation: The information from the Port Freeport case study will benefit public-sector and private-sector decision makers in activities such as investment planning, resource allocation, and operations management in general. The proposed webinar/workshop will allow for the sharing of implementation lessons for future applications and opportunities.

Web Links: https://martrec.uark.edu/

Budget (Funding) Amounts & Source(s) (US DOT +Match(s) =Total Costs): \$89,261 from MarTREC and \$44,630 from matching funds for a total of \$133,891.

Project Start and End Dates: 12/01/2017 – 09/30/2018

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